



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,583	08/30/2001	Jon Dakss	WMI-004 (8415/20)	9663
23363	7590	06/28/2007	EXAMINER	
CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA 91109-7068			HOSSAIN, FARZANA E	
		ART UNIT	PAPER NUMBER	
		2623		
		MAIL DATE	DELIVERY MODE	
		06/28/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/943,583	DAKSS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Farzana E. Hossain	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 March 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-9, 14, 17-21, 35-43, 46-52, 55, 56 and 61-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9, 14, 17-21, 35-43, 46-52, 55, 56 and 61-70 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Response to Amendment***

1. This office action is in response to communications filed 03/05/2007. Claims 1 and 35 are amended. Claims 2-9, 19, 20, 36-43, 48, 49 are original. Claim 14, 17, 18, 21, 46, 47, 50-52, 55, 56, 61 and 62 are previously presented. Claims 10-13, 15, 16, 22-34, 44, 45, 53, 54, 57-60 are cancelled. Claims 63-70 are new.
  
2. The applicant did not comment on the documents for the IDS from the last office action. The IDS objections are maintained.

***Response to Arguments***

3. Applicant's arguments filed 03/05/2007 have been fully considered but they are not persuasive.

The applicant argues that Claims 1 and 35 recite annotation data including only one mask for each video frame and that two or more video objects appear in each video frame. The applicant further argues that image tracking coordinates are generated for multiple entities, one for each image entity then there is not only one mask for two or more image entities. (Page 13).

In response to the argument, Srinivasan discloses that an annotation system tracking movement of two or more video objects or the swimsuit and the diver (Figure 3, 32, 27) in each of the plurality of video frames and only one mask for each video frame with a tracking box (Figure 3, 31, 29) and that graphic data to be overlaid on two or more video objects or entities in the corresponding frame (Column 5, lines 54-65, Column 6, lines 8-19, Column 7, lines 33-47).

4. Applicant's arguments with respect to claims 63-70 have been considered but are moot in view of the new ground(s) of rejection.

The applicant argues that Srinivasan does not teach or suggest the claimed object mapping table and information data structures to organize such innovative material appearing in video frame for claims 63 and 67 (Pages 14-15). The applicant further argues that cited references do not disclose the limitations of Claims 66 and 70 in particular.

In response to the argument, Srinivasan is used in combination with Wistendahl to reject claims 63-70. Wistendahl discloses object mapping table and information data structures (Column 6, lines 17-38, Column 7, lines 1-10, Column 9, lines 59-67, Column 10, lines 1-56). Wistendahl discloses limitations for Claims 66 and 70. See new rejections for claims 63-70.

***Information Disclosure Statement***

5. The information disclosure statement filed 1-11-02, 5-13-04 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

The applicant has submitted many of the foreign patents and non-patent literature documents. However not all documents in the information disclosure statement filed 1-11-02, 5-13-04 have been submitted including IBM Technical Disclosure Bulletin's "User Controlled Display of Hypermedia Links Via Mouse Location" and "Visual Behavior of Multimedia Hypervideo Links for Motion Video".

6. The information disclosure statement (IDS) submitted 31 July 2006. The submission has met the minimum requirements of 37 CFR 1.97 and 37 CFR 1.98. Accordingly, the examiner is considering the IDS.

It is noted, however, that the large number of references, represents a significant burden for the examination of the instant application. Therefore, the references have only been considered to the extent possible given limited examination resources. Should the applicant be aware that one or more of these documents is particularly relevant to patentability, it is requested that applicant's provide a concise explanation of

why the English language information is being submitted and how it is understood to be relevant.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-7, 17-20, 35-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Srinivasan et al (US 6,357,042 and hereafter referred to as "Srinivasan").

Regarding Claims 1 and 35, Srinivasan discloses a hyperlinked broadcast system and a method of generating a hyperlinked video signal (Figure 1, Figure 14, Figure 18) comprising: a video headend or video source provides video information for a video program including a plurality of consecutive video frames (Figure 1, 12, Column 7, lines 22-25, Column 8, lines 13-14, 38-49),

an annotation system tracing or tracking movement of two or more video objects appearing in each of plurality of consecutive video frames from a first location to a second location (Column 8, lines 5-37) and generating annotation data (Column 6, lines 8-19) and annotation data timing information (Column 7, lines 21-30, Column 8, lines 5-

Art Unit: 2623

50), the annotation data including only one mask for each video frame of the plurality of consecutive frames (Column 5, lines 54-65, Figure 3, Figure 4), each mask being stamped with the corresponding annotation data timing information based on a frame time of the corresponding video frame (Abstract, Column 7, lines 21-30, Column 8, lines 5-50), each mask including location (Figure 4, Column 8, lines 5-50) and graphic data of two or more graphic images to be overlaid on two or more video objects or entities in the corresponding video frame (Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 33-47); and

an augmented video information transmission generator receiving the annotation data, the video information, and the annotation timing information, the augmented video information transmission generator generating an augmented video transmission signal comprising annotation data, the annotation data timing information, and the video information, transmits the augmented video transmission signal to a receiver (Column 5, lines 54-65, Column 6, lines 29-33, Column 11, lines 36-37, Figure 18, Column 3, lines 53-55, Column 4, lines 3-7, 17-24),

wherein the augmented video information transmission generator associates the video information with the annotation data using the annotation data timing information (Column 5, lines 54-65, Column 6, lines 29-33, Column 11, lines 36-37),

wherein the receiver receiving the augmented video transmission signal is program for each of the plurality of consecutive video frames (Column 36, lines 41-49, Column 21, lines 34-52) to:

compare a current annotation data timing information with a current frame time of a current video frame (Abstract, Column 4, lines 35-37, 55-62, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 33-47, Column 12, lines 21-46, Column 36, lines 41-49, Column 21, lines 34-52);

retrieve the location and graphics data of the two or more graphics images from the identified mask if the comparison results in a match (Abstract, Column 4, lines 35-37, 55-62, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 33-47, Column 12, lines 21-46, Column 36, lines 41-49, Column 21, lines 34-52); and

overlay the two or more graphics images on the corresponding two or more video object appearing in the video frame based on the retrieved location and graphics data, wherein the overlaying of the two or more graphics images is synchronized on a frame by frame basis with the movement of two or more video objects from the first location to the second location over the plurality of consecutive video frames (Abstract, Column 4, lines 35-37, 55-62, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 21-47, Column 12, lines 21-46, Column 36, lines 41-49, Column 21, lines 34-52).

Regarding Claims 2 and 36, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses the augmented video information transmission generator comprises a component, which inserts data into the VBI or a vertical blanking insertion device (Column 35, lines 60-62, Column 36, lines 36-40).

Regarding Claims 3 and 37, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses that the augmented video information

Art Unit: 2623

transmission generator comprises a digital video data multiplexer (Column 36, lines 25-32).

Regarding Claims 4 and 38, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses that he timing information comprises at least one of timestamp information and a frame number information (Column 3, Column 4, lines 3-16, Column 7, line 23, Column 8, lines 5-14).

Regarding Claims 5 and 39, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses the programs comprise digital video signal (Column 36, lines 25-27).

Regarding Claims 6 and 40, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses the programs comprise analog video signal (Column 36, lines 36-40).

Regarding Claims 7, Srinivasan discloses all the limitations of Claim 1. Srinivasan disclose a post production environment (Figure 1, 11, Figure 18, 251, 253, 255), and a headend comprising the augmented video information transmission generator (Column 6, lines 33-35, Figure 18, 259), the video information and annotation data timing information are combined by the post production environment and transmitted to the headend (Column 7, lines 20-48, Column 8, lines 5-49, Column 35, lines 20-36).

Regarding Claim 14, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses displaying annotation data in response to a viewer request (Column 6, lines 8-19, Column 12, lines 21-40).

Regarding Claims 17 and 46, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses that the mask comprises location information of two or more objects or entities in an annotated video frame in the corresponding video frame (Column 5, lines 54-65, Column 7, lines 22-48, Column 8, lines 5-50).

Regarding Claims 18 and 47, Srinivasan discloses all the limitations of Claims 17 and 46 respectively. Srinivasan discloses the location information includes a graphics location reference that represents a fixed relation to a set of pixels associated with each object (Column 9, lines 19-55, Figure 4).

Regarding Claims 19 and 48, Srinivasan discloses all the limitations of Claims 18 and 47 respectively. Srinivasan discloses a table of pixels based on a tracking box and object (Figure 4). Therefore, it is necessarily included that the pixels include the upper left most pixel in the associated pixel set if the object that is being tracked is located at the upper most left corner (Figure 4, Figure 3).

Regarding Claims 20 and 49, Srinivasan discloses all the limitations of claims 18 and 48 respectively. Srinivasan discloses a table of pixels based on a tracking box and object (Figure 4), if the object is in the center position then the centroid pixel is in the associated pixel set (Figure 4, Figure 3). Therefore, it is necessarily included that the pixels include the centroid pixel in the associated pixel set.

Regarding Claim 41, Srinivasan discloses all the limitations of Claim 35. Srinivasan discloses inserting the annotation data timing information in a vertical blanking interval of an analog video signal (Column 36, lines 36-41).

Regarding Claim 43, Srinivasan discloses all the limitations of Claim 35.

Srinivasan discloses the transmitting the timing information and video information to a broadcast network and subsequently to the augmented video transmission generator (Column 5, lines 54-65, Column 6, lines 29-40, Column 7, lines 22-25, Column 36, lines 25-40).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan in view of Shoff et al (US 6,240,555 and hereafter referred to as "Shoff").

Regarding Claims 8, Srinivasan discloses all the limitations of Claim 7.

Srinivasan does not disclose that the headend is a cable headend. In analogous art, Shoff discloses a post production environment (Figure 2, 22), a broadcast network (Column 4, lines 43-50), and the post production environment combines video data and synchronized timing data and transmits to a headend or node (Column 4, lines 43-50). Shoff discloses that the node is a cable headend (Column 4, lines 45-52). Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Srinivasan to include that the headend is a cable headend (Column 4,

Art Unit: 2623

lines 45-52) as taught by Shoff in order to enable viewer interactively with video program (Column 1, lines 8-14) as disclosed by Shoff.

Regarding Claims 9, Srinivasan discloses all the limitations of Claim 7. Srinivasan does not disclose the headend is a satellite headend. In analogous art, Shoff discloses a post production environment (Figure 2, 22), a broadcast network (Column 4, lines 43-50), and the post production environment combines video data and synchronized timing data and transmits to a headend or node (Column 4, lines 43-50). Shoff discloses that the node is a satellite headend (Column 4, lines 45-52). Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Srinivasan to include that the headend is a satellite headend (Column 4, lines 45-52) as taught by Shoff in order to enable viewer interactively with video program (Column 1, lines 8-14) as disclosed by Shoff.

11. Claims 21, 50-52, 55, 56, 63-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan in view of Wistendahl et al (US 6,496,981 and hereafter referred to as "Wistendahl")

Regarding Claims 63 and 67, Srinivasan discloses a hyperlinked broadcast system and a method of generating a hyperlinked video signal comprising:

a video source providing video information for a video program including a plurality of video frames (Figure 1, 12, Column 7, lines 22-25, Column 8, lines 13-14, 38-49);

receiving video information for a video program including a plurality of video frames (Figure 1, 12, Column 7, lines 22-25, Column 8, lines 13-14, 38-49)

an annotation system generating annotation data and annotation data timing information (Column 8, lines 5-37), the annotation data including a plurality of masks and a plurality of object data packets (Figure 4, Figure 3, Column 8, lines 5-37), each mask corresponding to a particular video frame of a video program (Figure 3, 31, 33, 29, 27) and including graphics data associated with one or more video objects in the particular video frame (Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 33-47), each mask being associated with the corresponding annotation data timing information (Figure 4, Figure 3, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 33-47), and an object mapping table included in at least a particular one of the plurality of object data packets (Figure 4), the object mapping table including an entry associated with each of the one or more video objects in the particular video frame (Figure 3, Figure 4), communicating the annotation data timing information, the annotation data and the video information to an augmented transmission generator (Figure 1, Figure 3, Figure 4) and

an augmented video information transmission generator receiving the annotation data, the video information, and the annotation data timing information, the augmented video information transmission generator generating an augmented video transmission signal comprising the annotation data, the annotation data timing information, and the video information, and transmitting the augmented video transmission signal to a receiver, wherein the augmented video information transmission generator associates

the video information with the annotation data using the annotation data timing information (Column 5, lines 54-65, Column 6, lines 29-33, Column 11, lines 36-37, Figure 18, Column 3, lines 53-55, Column 4, lines 3-7, 17-24).

Srinivasan is silent on the annotation data includes a plurality of object data packets and object mapping table as claimed.

Wistendahl discloses on annotation data further includes a plurality of object data packets (Figure 3, 32, Column 17, lines 8-10), the mask further including an identifier or a hyperlink to an object mapping table or N data information (including values for several objects) (Column 6, lines 17-38, Column 7, lines 1-10) such as including at least one entry with an indicia from the corresponding mask identifying a particular video object or one entry associated with each of the one or more video objects in the particular video frame (Figure 2, Column 6, lines 17-38), each entry in the object mapping table referencing one or more information data structures included in one or more of the plurality object data packets (Figure 2, Figure 3), the information data structures including information for particular video object (Column 9, lines 59-67, Column 10, lines 1-56). Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Srinivasan to include annotation data further includes a plurality of object data packets (Figure 3, 32, Column 17, lines 8-10), the mask further including an identifier or a hyperlink to an object mapping table or N data information (including values for several objects) (Column 6, lines 17-38, Column 7, lines 1-10) such as including at least one entry with an indicia from the corresponding mask identifying a particular video object (Figure 2, Column 6, lines 17-38), the entry

Art Unit: 2623

further associating the indicia to information data structures included in one or more of the plurality of object data packets (Figure 2, Figure 3), the information data structures including information for particular video object (Column 9, lines 59-67, Column 10, lines 1-56) as taught by Wistendahl in order to use media content for interactive television (Column 1, lines 12-14, 45-67), to author exiting media content using tools to reduce development time (Column 2, lines 43-46) and so that media contact is kept uncorrupted so that the content can be displayed on any media delivery system or display platform (Column 3, lines 2-5) as disclosed by Wistendahl.

Regarding Claims 21 and 50, Shoff discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses that the mask comprises location information about an object in a video frame to be annotated or supplemental content to be added to video (Figure 4). Srinivasan is silent on the shape information. In analogous art, Wistendahl discloses that location and shape information of an object in the video frame (Column 10, lines 8-35). Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Shoff to include shape information of an object in the video frame (Column 10, lines 8-35) as taught by Wistendahl in order to use media content for interactive television (Column 1, lines 12-14, 45-67) as disclosed by Wistendahl.

Regarding Claim 51, Srinivasan and Wistendahl disclose all the limitations of Claim 50. Wistendahl discloses the shape information is represented by a hyper link

(Column 10, lines 36-56). The hyperlink can be a graphical overlay of the object (Column 9, lines 28-33).

Regarding Claim 52, Srinivasan and Wistendahl disclose all the limitations of Claim 50. Wistendahl discloses the shape information is represented by an outline of the object (Column 10, lines 25-28).

Regarding Claim 55, Srinivasan discloses all the limitations of Claim 1. Srinivasan is silent on the annotation data includes a plurality of object data packets, the mask including an identifier to an object mapping table including one or more of the plurality of object data packets, the object mapping table including at least one entry with an indicia from the corresponding mask identifying a particular video object, the entry further associating the indicia to information data structures included in one or more of the plurality object data packets, the information data structures including information for the particular video object. Wistendahl discloses on annotation data further includes a plurality of object data packets (Figure 3, 32, Column 17, lines 8-10), the mask further including an identifier or a hyperlink to an object mapping table or N data information (including values for several objects) (Column 6, lines 17-38, Column 7, lines 1-10) such as including at least one entry with an indicia from the corresponding mask identifying a particular video object (Figure 2, Column 6, lines 17-38), the entry further associating the indicia to information data structures included in one or more of the plurality of object data packets (Figure 2, Figure 3), the information data structures including information for particular video object (Column 9, lines 59-67, Column 10, lines 1-56). Therefore, it would have been obvious at the time the invention was made to one

of ordinary skill in the art to modify Srinivasan to include annotation data further includes a plurality of object data packets (Figure 3, 32, Column 17, lines 8-10), the mask further including an identifier or a hyperlink to an object mapping table or N data information (including values for several objects) (Column 6, lines 17-38, Column 7, lines 1-10) such as including at least one entry with an indicia from the corresponding mask identifying a particular video object (Figure 2, Column 6, lines 17-38), the entry further associating the indicia to information data structures included in one or more of the plurality of object data packets (Figure 2, Figure 3), the information data structures including information for particular video object (Column 9, lines 59-67, Column 10, lines 1-56) as taught by Wistendahl in order to use media content for interactive television (Column 1, lines 12-14, 45-67) as disclosed by Wistendahl.

Regarding Claim 56, Srinivasan and Wistendahl disclose all the limitations of Claim 55. Wistendahl discloses the receiver being configured to overlay a graphics image on a particular video frame for the particular video object based on the graphics data included in the corresponding mask (Column 9, lines 59-67, Column 10, lines 1-56), retrieve the identifier of the object mapping table from the corresponding mask response to a user selection associated with the overlaid graphics image (Column 6, lines 60-67, Column 7, lines 1-10, Column 9, lines 59-67, Column 10, lines 1-56); retrieve the object mapping table based on the retrieved identifier (Figure 3, Figure 7a); identify the indicia in the corresponding mask for the particular video object for which the graphics image was overlaid (Column 15, lines 3-5); locate the entry in the object mapping table with the identified indicia (Figure 5b, 51b, Figure 7a, Figure 7B); identify

Art Unit: 2623

the information data structures associated with the located entry (Figure 5a, Figure 5b; retrieve the information in the identified information data structures; and display the retrieved information on the display device (Figure 7a).

Regarding Claims 64 and 68, Srinivasan and Wistendahl disclose all the limitations of Claims 63 and 67 respectively. Srinivasan discloses comparing a current annotation data timing information with a current frame time of a current video frame (Abstract, Column 4, lines 35-37, 55-62, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 33-47, Column 12, lines 21-46, Column 36, lines 41-49, Column 21, lines 34-52); retrieve the location and graphics data of the graphics images from the identified mask if the comparison results in a match (Abstract, Column 4, lines 35-37, 55-62, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 33-47, Column 12, lines 21-46, Column 36, lines 41-49, Column 21, lines 34-52); and overlay one or more graphics images generated based on the retrieved graphics data on the one or more video objects appearing in the current video frame (Abstract, Column 4, lines 35-37, 55-62, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 21-47, Column 12, lines 21-46, Column 36, lines 41-49, Column 21, lines 34-52).

Regarding Claims 65 and 69, Srinivasan and Wistendahl disclose all the limitations of Claims 64 and 68 respectively. Srinivasan discloses the receiver is further programmed to draw the one or more graphics images on a frame-by-frame basis based on the graphics data included in a plurality of masks, the drawing of the one or more graphics images being synchronized to the corresponding video frame based on the annotation data timing information associated with the plurality of masks (Abstract,

Column 4, lines 35-37, 55-62, Column 5, line 54-65, Column 6, lines 8-19, Column 7, lines 21-47, Column 12, lines 21-46, Column 36, lines 41-49, Column 21, lines 34-52). Wistendahl discloses drawing one or more graphic images on a frame-by-frame basis based on the graphics data included in a plurality of masks (Column 14, lines 10-21, Column 10, lines 8-61).

Regarding Claims 66 and 70, Srinivasan and Wistendahl disclose all the limitations of Claims 65 and 69 respectively. Wistendahl discloses the receiver being configured to overlay a graphics image on a particular video frame for the particular video object based on the graphics data included in the corresponding mask (Column 9, lines 59-67, Column 10, lines 1-56), receive a user selection associated with one of the overlaid graphics images for a particular video frame (Column 15, lines 3-5), retrieve the identifier of the object mapping table from the corresponding mask response to a user selection associated with the overlaid graphics image (Column 6, lines 60-67, Column 7, lines 1-10, Column 9, lines 59-67, Column 10, lines 1-56); retrieve the object mapping table based on the retrieved identifier (Figure 3, Figure 7a); locate the entry in the object mapping table for the video object associated with the user selection (Column 6, lines 60-67, Column 7, lines 1-10, Figure 5b, 51b, Figure 7a, Figure 7B, Column 13, lines 1-25, Column 14, lines 10-21); identify the information data structures referenced in the located entry (Column 6, lines 60-67, Column 7, lines 1-10, Column 15, lines 3-5); locate the entry in the object mapping table with the identified indicia (Figure 5b, 51b, Figure 7a, Figure 7B); identify the information data structures associated with the

located entry (Figure 5a, Figure 5b); retrieve the information in the identified information data structures; and display the retrieved information on the display device (Figure 7a).

12. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan in view of Oguro et al (US 2001/0033739 and hereafter referred to as "Oguro").

Regarding Claim 42, Srinivasan discloses all the limitations of Claim 35. Srinivasan disclose inserting timing information into the VBI of an analog signal (Column 36, lines (Column 25-40). Srinivasan is silent the insertion of data in the vertical ancillary data or VBI of a digital video signal. Oguro discloses a television broadcast system, which transmits digital video signals to the user (Page 5, paragraph 0077) and inserts data into the VBI of a digital video signal (Page 5, paragraph 0076). Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Srinivasan to include inserting timing information or time stamps in the VBI (Column 4, lines 36, 37, 40-55) as taught by Hidary in order to provide a user friendly visual experience of television programming to a viewer (Column 1, lines 53-62) as disclosed by Hidary. Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Srinivasan to include inserting information in the VBI of a digital video signal (Page 5, paragraph 0076) as taught by Oguro in order to provide copy protect television broadcast programs of a digital video signal (Page 1, paragraphs 0001-0006) as disclosed by Oguro.

Art Unit: 2623

13. Claims 61, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan in view of Kaiser et al (US 6,615,408 and hereafter referred to as "Kaiser").

Regarding Claims 61 and 62, Srinivasan discloses all the limitations of Claims 1 and 35 respectively. Srinivasan discloses overlaying two or more graphics images for alerting a viewer of the interactive data (Column 6, lines 6-19). Srinivasan is silent on the overlaying of the graphics images is for alerting a viewer of the interactive data associated prior to the viewer transmitting an interactive command with respect to one of video object or video objects. Kaiser discloses overlaying of the two or more graphics images is for alerting a viewer of the interactive data associated with the two or more video objects prior to the viewer transmitting an interactive command with respect to one of the two or more video objects (Figure 6B, Column 10, lines 20-41). Therefore, it would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Srinivasan to include overlaying of the two or more graphics images is for alerting a viewer of the interactive data associated with the two or more video objects prior to the viewer transmitting an interactive command with respect to one of the two or more video objects (Figure 6B, Column 10, lines 20-41) as taught by Kaiser in order display a locator or locators for a video object or objects without clutter video (Column 1, lines 8-11, 34-40) as disclosed by Kaiser and to make it easier for a user so that they do not have to determine what is interactive and provides more information.

### ***Conclusion***

**14. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farzana E. Hossain whose telephone number is 571-272-5943. The examiner can normally be reached on Monday to Friday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FEH  
June 10, 2007



SCOTT E. BELIVEAU  
PRIMARY PATENT EXAMINER